

LISTING OF CLAIMS:

1-36. (canceled)

37. (Currently amended) An apparatus for communicating data about mobile vehicles, which comprises:

a plurality of mobile vehicles, a plurality of terminals with a display, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals;

the information including mobile vehicle data and terminal data; the mobile vehicle data including mobile vehicle identification data for identifying an individual mobile vehicle of the plurality of mobile vehicles, and mobile vehicle content identification data for identifying specific data in the mobile vehicle data; and the terminal data including terminal identification data for identifying an individual terminal of the plurality of terminals;

an input terminal of the plurality of terminals including input means for inputting a data request; the data request including the mobile vehicle identification data, the mobile vehicle content identification data, and the terminal identification data; and

the display altering a display mode of the display based on communication progression between the plurality of terminals and the plurality of mobile vehicles and an elapse of time since a last data request was input from the plurality of terminals to the plurality of mobile vehicles;

wherein:

when the data request is input into the input terminal; the input terminal transmits the data request, via the communication means, to the individual mobile vehicle of the plurality of

- 2 -

Application No. 9/936,712
Attorney docket No.: VX012357 PCT

mobile vehicles that is identified by the mobile vehicle identification data in the data request; and the individual mobile vehicle receiving the data request acquires the mobile vehicle data corresponding to the mobile vehicle content identification data in the data request; and transmits the acquired mobile vehicle data, via the communication means, to an output terminal of the plurality of terminals identified by the terminal identification data in the data request.

38. (Previously presented) An apparatus for communicating data about mobile vehicles, which comprises:

a plurality of mobile vehicles, a plurality of terminals, a server; and communication means for transmitting and receiving information between the plurality of mobile vehicles, the plurality of terminals, and the server; the information including mobile vehicle data, the mobile vehicle data including mobile vehicle identification data for identifying an individual mobile vehicle of the plurality of mobile vehicles and mobile vehicle content identification data for identifying specific data in the mobile vehicle data;

the server including memory means for storing the mobile vehicle data; and updating means for updating memory content of the memory means whenever new mobile vehicle data is received by the server;

an input terminal of the plurality of terminals transmitting, via the communication means, a data request including the mobile vehicle identification data and the mobile vehicle content identification data;

the individual mobile vehicle of the plurality of mobile vehicles corresponding to the mobile vehicle identification data in the data request receiving the data request, acquiring the

mobile vehicle data corresponding to the mobile vehicle content identification data in the data request, and transmitting the acquired mobile vehicle data via the communication means to the server;

the server receiving the acquired mobile vehicle data via the communication means, storing the acquired mobile vehicle data in the memory means, and transmitting the acquired mobile vehicle data via the communication means to the input terminal;

the server updating memory content of the memory means by the updating means with the acquired mobile vehicle data whenever the acquired mobile vehicle data is newer than corresponding data in the memory content of the memory means;

a request terminal of the plurality of terminals transmitting to the server, via the communication means, a subsequent data request including the acquired mobile vehicle data;

the server receiving the subsequent data request, retrieving the acquired mobile vehicle data corresponding to the subsequent data request from the memory means, and transmitting the acquired mobile vehicle data to the request terminal, via the communication means.

39. (Previously presented) The apparatus for communicating data about mobile vehicles according to claim 37, wherein when the data request of the input terminal includes an instruction work content for the individual mobile vehicle, and the instruction work content is presented by presentation means within the individual mobile vehicle; the presentation means presenting the instruction work content by at least one of a visual image, an audio signal, and a printout within the individual mobile vehicle.

- 4 -

Application No. 9/936,712
Attorney docket No.: VX012357 PCT

40. (Previously presented) The apparatus for communicating data about mobile vehicles according to claim 38, wherein when the data request of the input terminal includes an instruction work content for the individual mobile vehicle, and the instruction work content is presented by presentation means within the individual mobile vehicle; the presentation means presenting the instruction work content by at least one of a visual image, an audio signal, and a printout within the individual mobile vehicle.

41. (Currently amended) An apparatus for communicating data about mobile vehicles, which comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals;

an input terminal of the plurality terminals inputting a data request including mobile vehicle information relating to an individual mobile vehicle of the plurality of mobile vehicles and receiving information in response to the data request;

the input terminal including display means for displaying mobile vehicle identifiers for identifying the plurality of mobile vehicles; the display means including means for altering a display mode of the display means[[,]] based on ~~one of~~ communication progression between the plurality of terminals and the plurality of mobile vehicles[[,]] and an ~~elapsed~~ elapse of time since a last data request was input from the plurality of terminals to the plurality of mobile vehicles.

42. (Currently amended) An apparatus for communicating data about mobile vehicles, which comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals;

a receiving terminal of the plurality terminals receiving one of unrequested information from a mobile vehicle of the plurality of mobile vehicles and requested information from a mobile vehicle in response to a data request by the input terminal;

the plurality of terminals including display means, the display means displaying mobile vehicle identifiers for the plurality of mobile vehicles, and means for altering a display mode of the display means based on an elapsed time since a previous display of information for the plurality of mobile vehicles; and

the display means including means for altering a display mode of the display means based on communication progression between the plurality of terminals and the plurality of mobile vehicles and an elapse of time since a last data request was input from the plurality of terminals to the plurality of mobile vehicles.

43. (Currently amended) An apparatus for communicating data about construction machines, which comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals; construction machine information relating to an individual construction machine of

the plurality of construction machines being transmitted, via the communication means, from the individual construction machine to a receiving terminal of the plurality of terminals; the receiving terminal including a display screen for displaying the construction machine information, the display altering a display mode of the display based on communication progression between the plurality of terminals and the plurality of mobile vehicles and an elapse of time since a last data request was input from the plurality of terminals to the plurality of mobile vehicles;

a management area or a beyond-management area being established for each of the plurality of construction machines; and

the construction machine information including information that a construction machine has either departed from the management area or entered the beyond-management area, and the construction machine information being displayed on the screen of the receiving terminal.

44. (Currently amended) An apparatus for communicating data about construction machines, which comprises:

a plurality of mobile vehicles, a plurality of terminals with a display , and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals; construction machine information relating to an individual construction machine of the plurality of construction machines being transmitted, via the communication means, from the individual construction machine to a receiving terminal of the plurality of terminals; the display altering a display mode of the display based on communication progression between the plurality of terminals and the plurality of mobile vehicles and an elapse

of time since a last data request was input from the plurality of terminals to the plurality of mobile vehicles;

the construction machine information including information that an engine of one of the construction machines was started in a specific time frame, and the construction machine information being displayed on a screen of the individual construction machine.

45. (new) An apparatus for communicating data about mobile vehicles, which comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals, and information related to an individual mobile vehicle of the plurality of mobile vehicles being transmitted from the individual mobile vehicle to a receiving terminal of the plurality of terminals, via the communication means, and displayed on a ~~screen~~ display of the receiving terminal; the display altering a display mode of the display based on communication progression between the plurality of terminals and the plurality of mobile vehicles and an elapse of time since a last data request was input from the plurality of terminals to the plurality of mobile vehicles;

the plurality of mobile vehicles including an internal power supply; and

the mobile vehicle information including information that voltage of the power supply has fallen to or below a prescribed level that is displayed on the screen of the receiving terminal.

46. (Previously presented) An apparatus for communicating data about mobile vehicles, which comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals; and mobile vehicle information relating to an individual mobile vehicle of the plurality of mobile vehicles being transmitted from the individual mobile vehicle to a receiving terminal of the plurality of terminals, via the communication means; the receiving terminal including a screen for displaying the mobile vehicle information;

the plurality of mobile vehicles respectively including a starter for making the respective mobile vehicle operational by activation of the starter, start lock setting means for deactivating the starter and setting the respective mobile vehicle in an operation-suspended condition, and start lock release means for releasing the operation-suspended condition; and

the screen of the receiving terminal displaying at least one of information that corresponding mobile vehicles of the plurality of mobile vehicles were set in the operation-suspended condition by the start lock setting means and information that the operation-suspended condition was released by the start lock release means.

47. (Previously presented) An apparatus for communicating data about mobile vehicles, which comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals; and mobile vehicle information relating to an individual mobile vehicle of the

plurality of mobile vehicles being transmitted from the individual mobile vehicle to a receiving terminal of the plurality of terminals, via the communication means; the receiving terminal including a screen for displaying the mobile vehicle information;

the plurality of mobile vehicles respectively including a starter for making the respective mobile vehicle operational by activation of the starter, start lock setting means for deactivating the starter and setting the respective mobile vehicle in an operation-suspended condition, and start lock release means for releasing the operation-suspended condition; and

the screen of the receiving terminal displaying activated mobile vehicles, even though the activated mobile vehicles were set in an operation-suspended condition by the start lock setting means.

48. (Currently amended) An apparatus for communicating data about construction machines, which comprises:

a plurality of mobile vehicles, a plurality of terminals, and communication means for transmitting and receiving information between the plurality of mobile vehicles and the plurality of terminals, and construction machine information relating to an individual construction machine of the plurality construction machines being transmitted, via the communication means, from the individual construction machine to a receiving terminal of the plurality of terminals, the receiving terminal including a ~~screen~~ display for displaying the construction machine information; the display altering a display mode of the display based on communication progression between the plurality of terminals and the plurality of mobile vehicles and an elapse

of time since a last data request was input from the plurality of terminals to the plurality of mobile vehicles;

an upper limit of travel distance being determined for each of the plurality of construction machines; and

the ~~screen~~ display of the receiving terminal displaying the construction machine information that one of the construction machines traveled beyond the upper limit.

49. (Previously presented) The apparatus for communicating data about construction machines according to claim 43, wherein the receiving terminal is a portable terminal.

50. (Previously presented) The apparatus for communicating data about construction machines according to claim 44, wherein the receiving terminal is a portable terminal.

51. (Previously presented) The apparatus for communicating data about mobile vehicles according to claim 45, wherein the receiving terminal is a portable terminal.

52. (Previously presented) The apparatus for communicating data about mobile vehicles according to claim 46, wherein the receiving terminal is a portable terminal.

53. (Previously presented) The apparatus for communicating data about mobile vehicles according to claim 47, wherein the receiving terminal is a portable terminal.

- 11 -

Application No. 9/936,712
Attorney docket No.: VX012357 PCT

54. (Previously presented) The apparatus for communicating data about construction machines according to claim 48, wherein the receiving terminal is a portable terminal.

55. (Previously presented) The apparatus for communicating data about mobile vehicles according to claim 42, wherein information is presented on main presentation screen or first presentation screen at startup of the receiving terminal.

56. (Previously presented) The apparatus for communicating data about construction machines according to claim 43, wherein information is presented on main presentation screen or first presentation screen at startup of the receiving terminal.